

# **RULES FOR CARGO HANDLING APPLIANCES**

GUIDANCE FOR CARGO HANDLING APPLIANCES

**Rules for Cargo Handling Appliances**  
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**2011 AMENDMENT NO.1**  
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Rule No.31 / Notice No.44      30th June 2011  
Resolved by Technical Committee on 3rd February 2011  
Approved by Board of Directors on 25th February 2011

**ClassNK**  
NIPPON KAIJI KYOKAI

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# **RULES FOR CARGO HANDLING APPLIANCES**

## **2011 AMENDMENT NO.1**

Rule No.31      30th June 2011

Resolved by Technical Committee on 3rd February 2011

Approved by Board of Directors on 25th February 2011

“Rules for cargo handling appliances” has been partly amended as follows:

#### Amendment 1-1

### Chapter 1 GENERAL

#### 1.1 General

Sub-paragraph 1.1.1-3 has been added as follows.

##### 1.1.1 Application

**1** The Rules for Cargo Handling Appliances (hereinafter referred to as “the Rules”) apply to the cargo handling appliances which are installed on the ships classed with NIPPON KAIJI KYOKAI (hereinafter referred to as “the Society”), and which are intended to be registered under **Chapter 3 of the Regulations for the Classification and Registry of Ships.**

**2** The relevant requirements in **the Rules for the Survey and Construction of Steel Ships** apply to the materials, equipment, installation and workmanship of the cargo handling appliances, unless otherwise specified in the Rules.

**3** Cranes used for personnel transfers are to comply with the requirements specified in the Annex 1.1.1-3 “Additional Requirements for Cranes Used for Personnel Transfers”, in addition to the requirements specified in the Rules.

### Chapter 9 CERTIFICATION, MARKING AND DOCUMENTATION

#### 9.2 Assignment of Safe Working Load, etc.

Paragraph 9.2.2 has been amended as follows.

##### 9.2.2 Duplicated Assignment of Safe Working Load, etc.

The Society will assign, at the application of the ship owner, the following **(1) to (3)**~~or (2)~~ in addition to the safe working load etc. in accordance with the requirements in **9.2.1**:

- (1) The maximum load corresponding to an angle smaller than the assigned allowable minimum angle in case of derrick systems
- (2) The maximum load corresponding to a radius exceeding the assigned maximum slewing radius in case of jib cranes
- (3) The maximum load for personnel transfers specified in **1.1.1-3 of the Rules** in case of cranes

## EFFECTIVE DATE AND APPLICATION (Amendment 1-1)

1. The effective date of the amendments is 30 June 2011.
2. Notwithstanding the amendments to the Rules, the current requirements may apply to cargo handling appliances other than those for which the application for registration is submitted to the Society on or after the effective date.

### Amendment 1-2

## Chapter 1 GENERAL

### 1.1 General

Sub-paragraph 1.1.1-4 has been added as follows.

#### 1.1.1 Application

**1** The Rules for Cargo Handling Appliances (hereinafter referred to as “the Rules”) apply to the cargo handling appliances which are installed on the ships classed with NIPPON KAIJI KYOKAI (hereinafter referred to as “the Society”), and which are intended to be registered under **Chapter 3 of the Regulations for the Classification and Registry of Ships**.

**2** The relevant requirements in **the Rules for the Survey and Construction of Steel Ships** apply to the materials, equipment, installation and workmanship of the cargo handling appliances, unless otherwise specified in the Rules.

**3** Cranes used for personnel transfers are to comply with the requirements specified in the **Annex 1.1.1-3 “Additional Requirements for Cranes Used for Personnel Transfers”**, in addition to the requirements specified in the Rules.

**4** For mobile offshore drilling units, the requirements specified in this Rule are to be complied with, and in addition, the requirements specified in 12.1 to 12.4, IMO Resolution, A.1023(26) “The Code for the Construction and Equipment of Mobile Offshore Drilling Units (MODU Code)” are to be complied with.

## EFFECTIVE DATE AND APPLICATION (Amendment 1-2)

1. The effective date of the amendments is 1 January 2012.
2. Notwithstanding the amendments to the Rules, the current requirements may apply to units the keels of which were laid or which were at *a similar stage of construction* before the effective date.  
(Note) The term “*a similar stage of construction*” means the stage at which the construction identifiable with a specific unit begins and the assembly of that unit has commenced comprising at least 50 tonnes or 1% of the estimated mass of all structural material, whichever is the less.

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# **GUIDANCE FOR CARGO HANDLING APPLIANCES**

**GUIDANCE**

**2011 AMENDMENT NO.1**

Notice No.44      30th June 2011

Resolved by Technical Committee on 3rd February 2011

“Guidance for cargo handling appliances” has been partly amended as follows:

Annex 1.1.1-3 has been added as follows.

## **Annex 1.1.1-3 Additional Requirements for Cranes Used for Personnel Transfers**

### **Chapter 1 GENERAL**

#### **1.1 General**

##### **1.1.1 Application**

**1** Cranes registered under **the Rules for Cargo Handling Appliances** (hereinafter referred to as “the Rules”) in cases where they are used to transfer personnel are to comply with the requirements in this Annex in addition to the requirements of the Rules.

**2** The means of embarkation and disembarkation required by **the Rules for the Survey and Construction of Steel Ships** are not to be substituted by such cranes.

### **Chapter 2 SURVEYS**

#### **2.1 Registration Surveys**

##### **2.1.1 Drawings and Other Documents to be Submitted**

###### **1** Drawings for approval

The following drawing is to be submitted to the Society for approval:

(1) Equipment added for personnel transfers

###### **2** Documents for reference

The following document is to be submitted to the Society for reference:

(1) Operation manual for personnel transfers

###### **3** The operation manual specified in -2(1) is to contain the following (1) to (3):

(1) Restrictions on personnel transfer operations, which contain at least the following:

(a) Wind velocity, wave height, and visibility

(b) The maximum angle and slewing radius of cranes (horizontal and vertical distance to the object of embarkation or disembarkation)

(c) Safe working loads and hoisting, lowering, and swinging speeds

- (d) Embarkation areas of equipment used to transport personnel such as baskets (hereinafter referred to as “the basket”)
- (2) Items regarding persons engaged in personnel transfer operations, which contain at least the following:
  - (a) Roles of the operational master
  - (b) Qualification of the crane operator
  - (c) Arrangement of signalmen in cases where the object of embarkation or disembarkation cannot be visible from the crane control position
  - (d) Means to ensure the safety of persons in the basket and engaged in the operation
  - (e) Communications between the operational master and persons involved
  - (f) Means to address the emergency situations such as rescue means in the case of crane malfunctions
  - (g) Inspection and testing items prior to personnel transfer operations
- (3) Items to be checked prior to use of the basket, which contain at least the following:
  - (a) Specifications of the basket such as its own weight, SWL and capacity
  - (b) Maintenance records
  - (c) Certifications issued by an official body or a third-party body

### **2.1.2 Examinations at Registration Surveys**

**1** Crane appliances are to be examined and ascertained to be in good order by the following tests and surveys:

- (1) Operation tests of the equipment added for personnel transfers
- (2) Other tests considered necessary by the Society

**2** Appliances specified in **Chapter 6** on board the ship and Markings specified in **Chapter 7** are to be examined.

### **2.2 Annual Thorough Surveys**

At annual thorough surveys, crane appliances are to be examined and ascertained to be in good order by the following tests and surveys, in addition to the requirements in **2.4.2 of the Rules**.

- (1) Operation tests specified in **2.1.2-1(1)**
- (2) Examinations specified in **2.1.2-2**

## **Chapter 3 CRANES**

### **3.1 Safe Working Load**

The safe working load of the cranes for use for personnel transfers is to be less than 50 % of the safe working load specified in **Chapter 1 of the Rules**. The total weight of the basket (sum of its own weight and capacity load) is not to be more than this load.

## Chapter 4 LOOSE GEAR

### 4.1 General

The safety factor of any loose gear is to be 10 and more against the safe working load specified in 3.1.

### 4.2 Wire Ropes

In addition to the requirements specified in 6.3.1 of the Rules, wire ropes are to be of an anti-rotation type.

## Chapter 5 MACHINERY, ELECTRICAL INSTALLATIONS AND CONTROL ENGINEERING SYSTEMS

### 5.1 General

The machinery, electrical installations and control engineering systems used in the cargo handling appliances are to be arranged to prevent accidental falls of the basket and are to be able to lower the basket in the case of a power supply malfunction.

### 5.2 Brakes

1 The braking system of hoisting machinery is to comply with the following (1) and (2):

(1) Brakes normally equipped on hoisting machinery are to be provided with an override device.

(2) Hoisting machinery are to be provided with an additional brake which:

(a) complies with 7.2.2-1(4) of the Rules;

(b) is capable of being operated by circuits other than those for the brakes specified in (1);  
and

(c) is provided with an override device.

2 Hydraulic cylinders used for luffing or extending jibs are to be provided with mechanical devices which can maintain the position of the hydraulic cylinders in the case of a loss of power;

## **Chapter 6 Other Appliances**

### **6.1 Communication Devices**

Appropriate communication devices are to be provided to the operational master, the crane operator, the signalmen, and persons in the basket.

### **6.2 Wind Gauge**

Wind gauge is to be provided to ensure that the operational master can be informed of the wind velocity.

## **Chapter 7 CERTIFICATION, MARKING AND DOCUMENTATION**

### **7.1 Marking of Safe Working Load, etc.**

#### **7.1.1 Marking for Cranes**

1 At the location specified in 9.3.1 of the Rules, the safe working load, the maximum slewing radius, and other restrictive conditions of personnel transfers are to be marked.

2 At the locations of the crane control position and embarkation area, a notice indicating the safe working load, the maximum slewing radius, maximum wind velocity, maximum wave height, minimum visibility, and other restrictive conditions for personnel transfers is to be provided.

### **EFFECTIVE DATE AND APPLICATION**

1. The effective date of the amendments is 30 June 2011.
2. Notwithstanding the amendments to the Guidance, the current requirements may apply to cargo handling appliances other than those for which the application for registration is submitted to the Society on or after the effective date.